

A large, dark brown snake, possibly a python or boa, is coiled in a shadowed environment. The snake's body is thick and textured, with distinct scales visible. It is positioned diagonally across the frame, with its head at the top right and its tail extending towards the bottom left.

THE AUSTRALIAN HERPETOLOGICAL SOCIETY JOURNAL

THE AUSTRALIAN HERPETOLOGICAL SOCIETY

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COVER - Common Brown Snake (*Pseudonaja textilis t.*)

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EDITORIAL

1972 has come and gone. Over the past few months members have scattered North, South, East and West on field trips. Some have acted with admirable restraint and satisfied themselves with observations only. Others have brought back specimens for study. But there are others unfortunately who have been indulging in the practice of indiscriminate or over collecting. This has been a long standing problem in herpetology. An editorial in "Reptilia" February, 1954 deplored this same tendency as did the Newsletters of 1969, 1970. Any person keeping an animal in captivity has a moral obligation to provide that animal with the requirements to maintain it in good health. Elsewhere in this issue is an article on Diseases in Reptiles where it is pointed out that many reptiles are unable to adapt to changes in their surroundings. Each reptile kept requires individual daily attention, "exotic" species from other parts of Australia more so. If you cannot or will not give your animals this attention, don't keep them. For those people whose aim in life is to collect things we suggest you turn to stamps or match box labels.

Some members, particularly the younger ones, may think the subject is being over emphasised. Talk to our librarian, Mr. R. Wells, about the number of preserved reptiles in his possession, which came from backyard zoos and the like, around Sydney. Taking into account that the number he has received would only be a small proportion of the total fatalities we are not talking of hundreds or thousands of animals but tens of thousands.

Therefore, in 1973 collecting should be out and herpetology in. Anyone genuinely interested in reptiles would not knowingly cause the death of these animals. Mistakes are made, this is inevitable, but learn by these mistakes, or better still, before keeping a particular species ask around and learn from the mistakes of others. It is those who will not learn and who continue to make the same "mistakes" year after year who must be removed from the Herpetological scene.

NOTES ON THE KEEPING AND DISTRIBUTION OF THE
JACKY LIZARD (AMPHIBOLURUS MURICATUS)

By Stephen Groom.

After keeping these lively lizards for 3 years I am offering some of my observations of their behaviour in captivity.

Before continuing, I will give a brief description of the lizard for the benefit of those who have not encountered it.

The average size (within my collection) of a fully grown lizard is 12 inches, with the occasional specimen reaching 15 to 16 inches. They are very similar in shape and build to other smaller dragons of Australia.

The lizard is generally light or dark grey, depending largely on the region from which it comes. (Specimens from coastal areas are yellowish). Along the back are two rows of light coloured spots, which in some cases, are joined together forming two continuous bands. These spots usually continue down the tail to form a very attractive pattern. As with other dragons, the Jacky has very long back legs giving it the ability to run and climb very fast.

In captivity, my newly caught specimens settle down well, and soon get used to the idea of being confined, provided I restrain myself from handling them.

Within the cage is also a mixed collection of larger skinks, and as yet I have had no trouble between the different species, nor any trouble with a Jacky refusing to eat.

Very little is needed to meet the feeding requirements of these lizards, as they catch their own live food within the cage.

I feed mine twice a week, sometimes once, but to ensure an adequate supply of live food there is a fruit pile, to which I regularly add banana skins and bad fruit, to attract flies and other insects.

My lizards also enjoy worms and small snails, grasshoppers, spiders, and black ants. It often gives me great pleasure to watch these lizards catching flies in mid-air, seldom missing.

During the breeding season mainly, I have noticed that the males display head-bobbing, forearm waving, and tail flicking which forms a preliminary to mating, possibly to warn rival males to keep away.

The female Jacky lays 7 or 8 eggs in an average clutch, and these are not buried, but laid under a piece of bark or decaying log, and occasionally laid in the open without protection. However, these are just observations within my cage, and I could not say whether or not this pattern occurs in the wild.

The young when born measure about 1 inch.

Distribution within Victoria.

From my own observations on field trips I have concluded that the Jacky Lizard occurs almost throughout Victoria. The landscape in which they inhabit ranges from the heavy, hard-to-penetrate type of undergrowth found at Coastal resorts to open, sandy country together with mountainous land, as near Stawell.

I have found that the Jacky Lizard may live in colonies as in many areas I have observed large numbers of young and old alike within a small area.

At Stawell, in Western Victoria, I noted twenty-five specimens within a 50 yd. strip (approx) running parallel with the road. Also found in this area was a Sand Goanna (*Varanus gouldii*).

Near Frankston, about 50 miles from Melbourne, I encountered 21 specimens within what must have been a 20 yd. radius, if that. It is of interest to note that some of these were found on the beach, only feet from the water.

Other places where I have found the Jacky Lizard in large numbers, but distributed over a larger area, include Halls Gap, Point Leo (Mornington Peninsula), and Churchill National Park (about 8 miles from Melbourne).

Summing up, I feel that the Jacky Lizard is a worthwhile specimen to study and has the advantage of being relatively easy to keep provided the basic requirements are met.

* * * * *

NEW MEMBERS

Mr. G. Daly

21 Hargreaves Street,
CONDELL PARK. N.S.W. 2200.

Interests: Weights, growth rates
and life spans.

Mr. B. Thompson

5 Indarra Street,
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Interests: Lizards and snakes.

Mr. K. Merritt

12 Corowa Street,
WAVELL HEIGHTS. QLD. 4012.

Interests: All aspects of
Herpetology.

Mr. D. Hopper

81 Evans Road,
DUNDAS VALLEY. N.S.W.

Interests: Reptiles in general.

New Members (Contd.).

Mr. T. Moxley

7135 Deerfield Road,
Memphis,
TENNESSEE. 38128. U.S.A.
Interests: All forms of
Herpetology.

Mr. M. Ferris

21 Statham Avenue,
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Mr. M. Wells

69 Chetwynd Road,
MERRYLANDS. N.S.W. 2160.

Mr. K. Sousa

18 Dustin Street,
Peabody,
MASSACHUSETTS. 01960 U.S.A.
Interests: Chelonia, crocodilia

Mr. S. Cook

52A North Road,
YALLOURN NORTH. VIC. 3837.
Interests: Pythons, larger
lizards and dragons

Mr. T. Joy

60 Plymouth Street,
WANGANUI.
NEW ZEALAND.
Interests: Agamidae

Mr. W.W. Lamar III

4468 Cherrydale Road,
Memphis,
TENNESSEE. 38117. U.S.A.

SUCCESSFUL HATCHING OF CHELODINA LONGICOLLIS (SHAW)

By R. Wells.

An adult ♀ Eastern Snake-Necked Tortoise (*Chelodina longicollis*) was collected at Greystanes, N.S.W. (a western suburb of Sydney) on the 11th November, 1969. The specimen was taken in approximately 1 metre of water after it had been disturbed sunning on the bank of a small tributary of Prospect Creek.

Measurements: Carapace: length - 20cm. Max. Width - 14 cm.
Plastron: length - 16.5cm. Max. Width - 12cm.

On the 12th December, 1969 the specimen layed a total of 12 eggs under captive conditions.

Laying Procedure: The tortoise constructed a slanting hole (during early evening) in hard clay soil approximately 2 metres from a large pond. Although the soil was dry and hard, the base of the hole was quite moist indicating the specimen may have discharged a quantity of cloacal fluid to minimise the resistance in digging through such soil. The dimensions of the hole were as follows:

Surface diameter: 5 cm.
Depth : 10 cm.
Base diameter : 7.5 cm.

When the deposition of the eggs was completed, the hole was partly sealed with the excavated soil and then abandoned. The eggs were subsequently removed and inspected for irregularities or damage; one egg had been cracked during laying - the others however, appeared normal.

Method of Incubation: As an improvisation, a wide-mouthed jar was selected and prepared in the following manner:- The base of the jar was covered with layers of damp tissue paper to a depth of 1 cm., followed by a 5 cm. layer of fine black soil, (slightly moistened). The eggs (including the cracked one) were placed on this, then lightly covered by a final layer of soil (4 cm. deep).

This makeshift incubator was then positioned over a covered 150 watt globe which provided a variable base heat (18° to 26°C), the heat source being available for 9 or 10 hours a day. Throughout the period of incubation, water was regularly sprayed over the soil surface to maintain a satisfactory percentage of humidity within the jar.

Details of Hatching: The first 3 hatchings (a,b,c) took place on the 9th March, 1970 - 87 days after laying. This was followed early next day, with the arrival of two more specimens (d,e).

On the 11th March, five eggs which suggested infertility by their darkened appearance, were examined. Four were found to verify infertility when opened but the fifth contained a dead embryo, this being the egg that cracked during laying.

On the 13th March (91 days after laying) an egg in the process of inspection was accidentally dropped and broken. A fully developed tortoise, possibly only hours from hatching, was discovered - it suffered no ill effects from its impromptu hatching (f).

The last egg didn't look very promising due to an early growth of mould. It was subsequently opened and found to be infertile.

Measurements at Hatching:

	Carapace		Plastron	
	Length	Max. Width	Length	Max. Width
a)	29 mm.	24 mm.	25 mm.	14 mm.
b)	27 mm.	22 mm.	22 mm.	13 mm.
c)	25 mm.	22 mm.	22 mm.	18 mm.
d)	29 mm.	24 mm.	24 mm.	15 mm.
e)	27 mm.	22 mm.	22 mm.	18 mm.
f)	28 mm.	24 mm.	24 mm.	14 mm.

A R E A S U R V E Y.

One of our Victorian members, Neil Sonnemann, has reported the occurrence of the following species of reptiles in the Beechworth and surrounding districts of Northern Victoria.

LIZARDS

- | | |
|---|--|
| <u>Tiliqua scincoides</u>
(common Blue-Tongue) | - common - found in grazing lands and hills. |
| <u>Tiliqua nigrolutea</u>
(Blotched Blue-Tongue) | - occasionally found - mainly in the hills. |
| <u>Tiliqua nigrolutea</u>
(alpine form) | - common in the Myrtleford district. |
| <u>Sphenomorphus quoyii</u>
(Water skink) | - very common - found on creeks and rivers. |
| <u>Sphenomorphus tympanum</u>
(alpine water skink) | - common - in the Myrtleford district. |
| <u>Egernia striolata</u>
(tree skink) | - occasionally found - mainly in the hills. |
| <u>Ctenotus taeniatus</u>
(copper-tailed skink) | - very common - grazed areas and hills. |
| <u>Ctenotus Lesueurii</u>
(striped skink) | - very common - grazed areas and hills. |
| <u>Lerista bougainvillii</u>
(bougainvilles skink) | - very common - mainly under flat stones in all areas. |

- Leiolopisma delicata*
(fence skink) - very common in all areas.
 - Hemiergis decresiensis*
(Montane Three-toed skink) - very common - mainly grazing areas.
 - Varanus varius*
(Lace monitor) - very common - hilly areas and along roads.
 - Delma fraseri*
(Fraser's legless lizard) - very common - grazed areas (beneath logs and fence posts).
 - Amphibolurus muricatus*
(Jacky lizard) - common - mainly in the hills.
 - Amphibolurus barbatus*
(bearded dragon) - occasionally found - mainly in the hills and grazed areas.
 - Diplodactylus vittatus*
(wood gecko) - very common under exfoliating granite in hilly areas few in grazing areas.
 - Phyllodactylus marmoratus*
(marbled gecko) - common - found in granite areas and under bark of stumps.
- SNAKES
- Pseudechis porphyriacus*
(red-bellied black snake) - moderately common - along creeks, dams, grazing areas and in the hills (valleys).

<u>Pseudonaja textilis</u> (eastern brown snake)	- slightly more common than the black snake - found anywhere
<u>Notechis scutatus</u> (tiger snake)	- very common - six miles south of Beechworth, common along Ovens and King Rivers.
<u>Austrelaps superba</u> (Copperhead)	- moderately common - five miles north of Beechworth in high altitude hilly areas.
<u>Denisonia flagellum</u> (Little whip snake)	- occasional specimen - found on slopes of hills beneath granite on soil during winter.
<u>Morelia spilotes variegata</u> (Carpet Python)	- rare - Wangaratta Ranges
<u>Rhamphotyphlops nigrescens</u> (Eastern Blind Snake)	- moderately common - hills and grazed areas.
 <u>TORTOISES</u>	
<u>Chełodina longicollis</u> (Long-necked tortoise)	- common - dams, creeks and rivers.
<u>Chełodina expansa</u> (Broad-shelled Tortoise).	- uncommon - creeks and rivers.

AUSTRALIAN HERPETOLOGICAL SOCIETY

- VICTORIAN BRANCH

On the 22nd November, 1972 the inaugural meeting of the Victorian Branch of the Australian Herpetological Society was held at the Conference Room in the National Museum. Sixteen people were present and a steering committee was elected to establish the Branch and carry out other matters preparatory to a full election.

The committee consists of:

PRESIDENT:	Peter Brown	-	16 Mulgra Street, FRANKSTON. VIC. 3199. Phone 787 2878.
TREASURER:	Wal Barker	-	4/63 Wattle Valley Road, CANTERBURY. VIC. 3126. Phone 836 0726.
SECRETARY:	Julie Tilbrook	-	504 High Street Road, MOUNT WAVERLEY. VIC. 3149. Phone 232 4929.
COMMITTEE MEMBERS:			Drew Haffendon Stephen Wilson

The Branch has held its first excursion to Toolern Vale. Members are very enthusiastic and a number of new recruits have resulted.

We hope that this will be the beginnings of a new era for the Society and look to the eventual formation of Branches in the other States.

LIZARD MIMICKING A SNAKE - JUVENILE

Tiliqua casuarinae (Dumeril and Bibron).

By P.R. Rankin.

Many lizards - notably pygopods (snake lizards) and some of the skinks with abbreviated limbs resemble snakes, but relatively few actively mimic them. Bustard (1970) discusses this - mainly in regard to pygopods mimicking snakes.

I have been able to find nothing published about T. casuarinae actively mimicking snakes, although it is generally acknowledged by most writers that the species is very serpentine in appearance. Bustard (personal communication) expressed surprise when confronted with the following information:

In June, 1970 while on a study trip near Martinsville N.S.W., I had the opportunity of observing several juvenile She Oak Skinks (T. casuarinae), to all intents and purposes mimicking juvenile Common Brown Snakes (Pseudonaja t. textilis).

Juvenile She Oak Skinks - from this area at least have a broad black band on the nape and another on the neck, while the frontal area of the head is greyish-brown. There is also a vertical black streak through the eye. Between the bands on the nape and neck and around the auricular region is a distinct orange tinge. The body is olive coloured with black edged scales, and although unbanded, the skink gives an overall appearance of a juvenile Brown Snake - especially when curled up. The abbreviated size of the limbs added to this impression.

The specimens were discovered beneath sheets of iron-bark and blocks of wood lying on the ground. They were loosely coiled with the head on top and clearly visible. The limbs were barely noticeable. When molested, the skinks did not run quickly under cover, (as adults of their species often do) but kept their loosely coiled positions and raised their heads, opening their mouths wide and champing the jaws. When a finger was introduced,

they would bite it without hesitation, pressing home the attack with ferocity.

I have observed numbers of juvenile Common Brown Snakes in the wild state and regard this skink's appearance and behaviour upon disturbance as being very reminiscent of a juvenile Brown's.

A captive juvenile T. casuarinae was seen to ward off a juvenile White's Skink (Egernia whitii) twice its own length by the above bluff.

To conclude, I would like to add that small elapid snakes are common in the area where this observation was made, many having darkened or variegated napes (as is not uncommon in this family of snakes). It is quite possible that a potential predator would have met with small aggressive snakes on previous occasions.

References:

- Bustard, H.R. 1970: "Australian Lizards" Collins.
Cogger, H.G. 1967: "Australian Reptiles in Colour" Reed.
Frauca, H. 1966: "Book of Reptiles" Jacaranda.
Worrell, E. 1963: "Reptiles of Australia" Angus and Robertson.

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"HERPETOFAUNA" COVER

A new cover design is being considered for the next issue of "Herpetofauna" (May, 1973). Any suggestions? Do you have any suitable photographs (black and white preferably) or sketches?

It's your Journal so don't leave it to others, show some initiative and send your suggestions, comments or criticisms to Mr. J. Verhagen, Lot 27 Hanlan Street, NARARA. N.S.W. 2251.

DISEASES OF CAPTIVE REPTILES

By Henry L. Hirschhorn, B.V.Sc.

Maladaptation Syndrome

A survey of reptiles dying at Philadelphia Zoological Gardens over a 66 year period showed that the major cause of death (up to 60% of Chelonians and 80% of snakes) was inability to adapt to the captive environment.

This major diagnostic category includes a series of conditions related by clinical signs, although pathogenic mechanisms might vary. Gross diagnoses of this syndrome were highly accurate because of its stereotyped pattern and appearance.

Some reptiles do not eat in captivity and die of uncomplicated starvation. Others live for a long time eating little, deteriorating slowly from malnutrition and other stressors. Their tissues eventually lose most of their structural integrity and ability to heal. The tissues break down, particularly at points subject to ordinarily trivial trauma, with resultant ulceration of the mouth ("mouth rot" or "canker"), skin ("skin rot") or cloaca, and necrosis and ulceration of enteric mucosa. Ulcers invariably become infected, occasionally with pathogenic bacteria, but usually with otherwise innocuous organisms. Because of lowered host resistance, these organisms produce disseminated sepsis, abscesses, or vegetative endocarditis (damage to heart valves). Enteric organisms invade the gut wall and produce haemorrhagic or exudative enteritis. Death follows rapidly once infection is established.

Debility may permit an overgrowth of parasites, which are usually present in considerable variety in wild-caught reptiles. Wasted individuals may be overcome by them and die with verminous pneumonia, intestinal obstruction or exhaustion.

Females recovering from a mild case of the syndrome may be especially prone to impaction of the oviduct ("egg binding") from damage to that organ by infection as well as from inactivity.

Psychogenic anorexia and long term failure to eat produce atrophy of the intestinal mucosa and wall and inability to accommodate the first normal feeding, with impaction of the intestine.

The end result of the maladaptation syndrome is stereotyped and unmistakeable at post-mortem. The specimen is wasted, all fat deposits are depleted and the tissues, particularly the skin, may tear at a touch.

Any useful concept of environment must include recognition not only of objective external physical elements but also the way the individual perceives and responds to them. The inextricable relationship of environment and disease is unusually clear in those reptiles that by inherent behaviour patterns as well as physiologic modifications are limited in their ability to adapt to changes in their surroundings. This limitation is the major cause of death in captive reptiles.

Snakes in particular tend to have very specific adaptations and relatively inflexible requirements and behaviour patterns. They tolerate environmental disturbances poorly. The majority of their diseases ("canker", "skin rot", pneumonia etc) can be attributed to a failure to adapt to the conditions of captivity; that is, the major factor is the inability of the collector (zoo etc.) to maintain an acceptable facsimile of the natural environment. Maintenance of low vibration levels, provision of preferred food species, solitude, appropriate light periods and levels of ultraviolet radiation, temperature and humidity may be almost impossible. Spontaneous exercise may be almost absent in some species.

To accept that reptiles may deteriorate and die of maladaptation and its consequences within the first two years of captivity presents little problem. It is not as easy to explain pathologically identical deaths in animals that have lived for many years in apparently satisfactory adaptation, even though their behaviour later become disturbed. This difficulty may be resolved if it is remembered that in large part, environment

exists as it is perceived and that it is dynamic. A new source of disturbing vibration, changes in size of cagemates, addition or subtraction of specimens from the exhibit, change of keepers and maintenance or repairs of cages may represent a significant alteration to the environment.

Other diseases

There are many other primary disease conditions of reptiles which affect the whole animal (e.g. Tuberculosis, Amyloidosos) or certain organs (cancers, heart diseases, liver disease etc.), but very few of them show specific diagnostic signs before death, and are usually diagnosed post-mortem.

Some bone diseases, "kidney stones" and "gout" may be diagnosed and treated in the live animal.

To be continued.

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SLIDE LIBRARY

The Society is endeavouring to build up a Library of 35 mm. slides depicting Australian reptiles and fauna. These will be used during talks given to outside organisations and also for screening at Society meetings. If any members have Herp. slides which might be suitable would they please send them to G. Swan, 20 Cashel Crescent, Killarney Heights. N.S.W. 2087. The slides will be returned after copies have been taken and the donors name will be noted on the Society copy.

LETTER TO THE EDITOR

Recently, my brother found a bearded dragon in bushland near our home, and gave it to me. Since I have not recorded the bearded dragon as occurring naturally in the area, I am led to believe that it was released there. More evidence to support this was given by the fact that the lizard was rather thin, and has one eye badly infected and festering. Although the injury to the reptile's eye could have taken place after its release, I think it more likely that it was released because of this affliction.

Now it seems to me that if we want to deprive animals of their freedom, we must undertake to look after them properly and give better than natural conditions to justify our keeping them. This means treating sickness or injury that may accidentally occur - because we - the keepers are responsible for our animal's lives. Dumping sick or injured animals is irresponsible, wasteful, and cruel. Most diseases and injuries can be cured (get advice from Veterinarians, Zoos, Museums or Julie Tilbrook - there is no shortage of places), and if not at least the animal should be humanely destroyed.

If a sick reptile is released into the wild, it may well pass on its disease to other animals (or man) and further life is wasted and more suffering caused through one stupid act. I am not talking about the release of healthy reptiles, which are quite able to look after themselves, and are not intermediaries in the spread of disease.

Through some unscrupulous person's irresponsible act the bearded dragon has now lost the sight in one eye, when with early treatment, it might still have been able to use that eye.

I am pleased to say that the infection has now cleared up, and although blind in one eye the lizard is on the road to recovery. It can count itself lucky that it was found and treated - many others which are released perish needlessly.

P.R. Rankin,
12 Finlays Avenue,
EARLWOOD. N.S.W. 2206.

BROAD-HEADED SNAKE
HOPLOCEPHALUS BUNGAROIDES

By Doug Adams.

Several members have indicated a special interest in the above-named snake, and have asked me for information. The following is extracted from my records.

A male specimen was caught at Kanangra Walls (Western Blue Mountains) on 21st May, 1966. It was found sunning itself in the early morning on a track down a steep mountain side. The slope covered by small rocks up to a foot in diameter, which were scattered all over and around larger firmly set boulders. Small trees grew out from between the rocks and shale. The weather was cool and it had been snowing the night previously. The snake was not very active when caught and did not really attempt to get away.

This snake sloughed on 24th October, 1966 at 7.15 p.m. five months after capture. It did not eat at all until after sloughing. During this period without food the snake did not lose condition and it maintained perfect health. During the semi-hibernation of Winter all body processes slow down and practically no nourishment is required. The little energy used comes from body fat.

This specimen ate skinks and dragons. It was mainly nocturnal. Usually waiting till after dark before coming out of its log to move around and eat. In the morning it would come out to sun itself, and sometimes in the middle of the day too, if it was not hot. It would sometimes eat in daylight.

There were two notable observations made about this snake. The first was that once it fed a day before it sloughed. It was a heavy meal too. This is the only time I have had this happen with any snake. I believe this is truly unusual - snakes usually stop feeding a couple of weeks prior to shedding their skin. The second notable observation was that this specimen would not eat mice.

The colour of this snake is dark black with a yellowish belly. There are numerous bands on the dorsal surface made of yellow dots. As with the Diamond Python (*Morelia s. spilotes*) the light and dark colouration of the skin comes out on the sloughs.

When this snake was caught it was the only one known from that area. It is still the only one I know of, from Kanangra Walls. This is despite the fact I have observed the fauna of the area numerous times. The species must be described as rare on the Western edge of the Blue Mountains.

The scale count was dorsals 21 rows, ventrals 206 - strongly keeled at both sides, anal 1, subcaudals 52 single.

The second Broad-Headed Snake I had came from South of Sydney, West of the Royal National Park. Reports of observations indicate that the species is fairly common around the Royal National Park area, (in the Park, and a little South and West of the Park). Page 23 of February's journal tells us that the species lived around Sydney until forty years ago. Lack of present day observations would confirm that this population is probably extinct. The greatest killer of any animal is man's increasing civilization with resultant disappearance of bushland.

My second Broad-Head was obtained about the same time as the first specimen, and it was kept in the same enclosure. This one ate half-grown mice. The snake usually killed the mice with a snap-bite. The mice died very quickly, then the snake came up and swallowed them. Broad-Heads are usually only about two feet long. This small size is probably the only reason no person has died from a bite. But they can make one sick if bitten, and it's not too hard to get bitten. Broad-Heads are very highly strung and don't hesitate to strike.

When I put a lizard in with the two Broad-Heads, the one from Kanangra Walls would eat it - the Eastern specimen wasn't interested. When I put in a mouse the Eastern specimen would eat it - the Kanangra Walls specimen was never interested.

The mouse-eater only once had a lizard, but the lizard eater never ate mice.

The scale count of the second specimen was: dorsals 21 rows, ventrals 214, anal 1, subcaudals 31 - but the tip of the tail was missing.

The article in the February Journal gives Burragorang as a Southern record. My third specimen beats this. It came from Kangaroo Valley. It was found in the usual Broad-Head habitat of rock-on-rock along sandstone ridges. It fed on skinks and geckos. Scale count, dorsals 21 rows, ventrals 218, anal 1, single subcaudals 57.

My fourth Broad-Head came from South-East of Bell. It ate skinks and geckos. Scale count dorsals 21 rows, ventrals 212, anal 1, subcaudals 56 single.

The species has been recorded a couple of times from Lawson, and I found a slough at Woodford. In my opinion the Broad-Head Snake is not uncommon in the Blue Mountains.

It would be about 85 miles from Bell to Kangaroo Valley. There are vast areas of bushland in between. We know there are Broad-Heads at Burragorang, which is in the centre. So my four specimens indicate a distribution of 3,500 square miles.

Broad-Heads live in the same bush and habitat as the Diamond Python. These two snakes are coloured similarly. It is well known that Broad-Heads are mistaken for juvenile Diamond Pythons. I know of a case where somebody picked up and handled what he thought was the harmless serpent. He found out the difference when bitten.

It cannot be an accident that the two entirely different snakes are coloured the same. I think the key lies in the fact that both are nocturnal and both live in scrub. Being dark black in colour would blend with the darkness. Having yellow spots would blend in with the spots of moonlight shining down through the

leaves. The two snakes would be near invisible in these circumstances. This, of course, would help them to catch their prey. The thought that the harmless young Diamonds may be mimicking their highly venomous doubles also interests me. A nocturnal carnivorous marsupial could not feed upon juicy young Diamond Pythons. It would only be a matter of time before it seized a Broad-Headed Snake. A bite from this snake would easily kill the predator. We know that predators recognize some colour patterns as a sign of danger. Thus they may instinctively leave young Diamonds alone.

I found the Broad-Headed Snake to be a good eater and an excellent snake to keep in captivity. I kept them in 2' x 1' aquariums with gauze wire on the top. Sand, soil, grass, logs made of pieces of bark, and a water dish were provided. All my four specimens maintained perfect health. I was sorry to have to give them away when I entered National Service.

The Genus *Hoplocephalus* has two other species. The banded *H. stephensii* represents the Genus of the North Coast. The rarer Pale-Headed Snake, *H. bitorquatus*, appears to be an inland form.

H. bungaroides is not cannibalistic. *H. stephensii* and *H. bitorquatus* are both cannibals.

H. bungaroides and *H. stephensii* give birth to live young. *H. bitorquatus* has not often been kept in captivity. However, one of our members has recorded a specimen laying two eggs.

I would be interested in learning more about the Genus *Hoplocephalus*. Members could write to me C/- Rural Bank, Gordon, 2072 giving their observations, especially localities. With this new information I could write another article on the Genus.

C A N K E R

By B. Irvine.

It has been said that canker is strictly a captive disease, but on a recent field trip to the Atherton Tablelands, I caught a specimen, which had canker, the disease being around a broken tooth. The canker was oval in shape measuring approximately 1mm x .2m. The disease was noted on arrival at a friends house, about 3 hours after capture, when I was applying Terramycin in the mouth of the python as a precautionary measure.

The python was an Amethystine Python, approximately 14 ft. in length, caught on a rock on a river bank, bordered by thick jungle, the area being too remote to be a released specimen. It is assumed that the infection was caused by the tooth being broken in a fight with another snake, or in subduing the last food animal.

I mentioned the fact that canker was supposed to be only a captive disease to two of my friends Mr. Harold Snell and his son Robert, who live on the Tablelands, and who have in the past observed many Amethystine Pythons. They both assured me that, at a very conservative estimate 3% - 4% of all Amethystine Pythons that they have caught, have had canker at the time of capture, but a figure of 5% would be closer to the mark.

One particular specimen that they could recall, was one so heavily infected with the disease, that they left it bagged on the river bank, and made a special trip back home to get a bottle of Sulphamezathine to take back to treat the python before releasing it, Sulphamezethine being at the time the most effective cure.

On this same trip I had the opportunity of examining a Carpet Python which had just been caught and which was suffering from watery blister. The specimen was examined in the field and again could not have been a recently released animal.

SNAKES AND LADDERS

"With reference to Miss J. Tilbrooks article on Ulcerative Stomatitis, over the years I have used 10% solution of Listerine together with an Atomized Spray of Terramycin, this being carried out daily for 1 week and to date I have never lost a reptile with this disease as long as the temperature was in the region of 76° - 84° while the treatment was in progress. For the past 3 years I have been using Incremin Drops in the drinking water 0.5ml. per pint of water. These drops were used when I had trouble feeding certain species of snakes."

R. Frazer,
R.M.B. 46,
Pacific Highway,
MOONEE. 2450.

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One of our members, Trevor Myles reports that a Pinktongue Skink *Tiliqua gerrardii* caught inside a house at Coffs Harbour, gave birth to fifteen young during the third week of January, 1973.

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We could do with a lot more observation or bits and pieces from readers for inclusion in the Snakes and Ladders column.

THE AUSTRALIAN HERPETOLOGICAL SOCIETY

This Society was formed to enable people interested in reptiles and herpetology to meet regularly together.

The aims of the Society are:-

- (1) To collect and exchange information on all aspects of Australian reptiles and amphibians.
- (2) To encourage the study of reptiles and amphibians - both in their natural state and in captivity.
- (3) To promote a sane and reasonable attitude to reptiles and amphibians among the general public.
- (4) To organise field work in all parts of Australia and to render all possible assistance to members on collecting trips away from their home territory.

Authors of articles contained in the Journal are responsible for the opinions expressed and for the accuracy of the facts in their contributions.

